

CLAIMS

We claim:

1. An apparatus for sensing the level of a substance contained in a tank having a bottom portion and a side wall portion, comprising:

a first, thin planar electrode associated with said side wall portion;

a second, thin planar electrode associated with on said side wall portion;

said second electrode arranged on said side wall portion substantially above said first electrode with respect to said bottom portion;

said first electrode coupled to a first resistor and to a first input of a detection circuit;

said second electrode coupled to a second resistor and to a second input of a detection circuit;

a strobe line coupled to said first resistor and said second resistor;

wherein said detection circuit produces a low-level output when said fluid substantially covers neither said first nor said second electrode;

wherein said detection circuit produces a low-level output when said fluid substantially covers both said first and said second electrode;

wherein said detection circuit produces a high-level output when said fluid substantially covers one, but not both, of said first and said second electrodes.

2. The apparatus of claim 1 wherein said substance is a liquid.

3. The apparatus of claim 2 wherein said liquid has a low dielectric constant.

4. The apparatus of claim 2 wherein said liquid has a high dielectric constant.

5. The apparatus of claim 1 wherein said substance is a powder.
6. The apparatus of claim 1 wherein at least one of said first and said second electrode is disposed on said side wall portion of said tank.
7. The apparatus of claim 6 wherein said at least one of said first and said second electrode is disposed on an outside surface of said side wall portion of said tank.
8. The apparatus of claim 6 wherein said at least one of said first and said second electrode is disposed on an inside surface of said side wall portion of said tank.
9. The apparatus of claim 1 wherein at least one of said first and said second electrode is embedded within said side wall portion of said tank.